

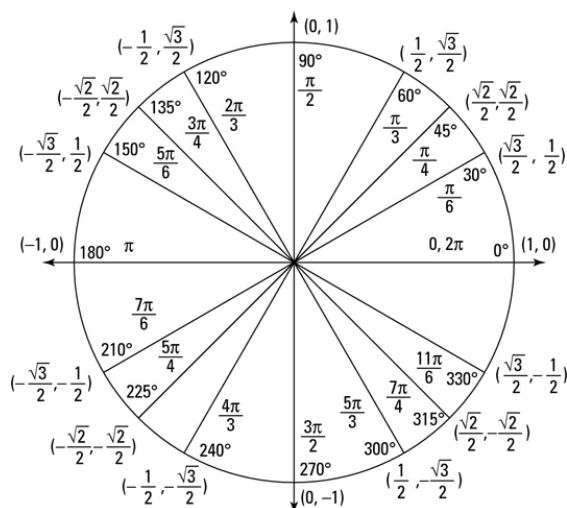
3.1 – 3.7 Trig. Unit Outline

Name _____ Date _____ Period _____

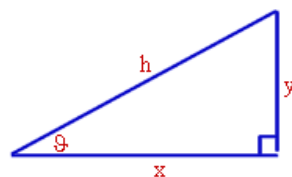
Learning Target	Assessment	M.L. 4	M.L. 3	M.L.2	M.L.1
1. I can convert angles from degrees to radians and from radians to degrees.	3.1 Worksheet 3.1-3.4 Review & Quiz 3.1-3.7 Review & Test				
2. I can use the arc length formula to find arc length, angle measure or radius of a circle.	3.1 Worksheet 3.1-3.7 Review & Test				
3. I can convert an angular speed to a linear speed or linear speed to angular speed.	3.2 Worksheet 3.1-3.4 Review & Quiz 3.1-3.7 Review & Test				
4. I can find positive and negative coterminal angles for a given angle.	3.2 Worksheet 3.1-3.4 Review & Quiz				
5. I can find the six trig. ratios for a right triangle.	3.3 Worksheet 3.1-3.4 Review & Quiz 3.1-3.7 Review & Test				
6. I can use trig. ratios from the special right triangles to find an angle. Ex. Find θ if $\sin \theta = \frac{1}{2}$.	3.3 Worksheet 3.1-3.4 Review & Quiz 3.1-3.7 Review & Test				
7. I can evaluate exact values of the trig. functions by using a reference triangle (unit circle). Ex. $\tan(\pi/4)$	3.3 Worksheet 3.1-3.3 Review & Quiz 3.1-3.7 Review & Test				
8. I can find the six trig. functions for θ , given a point in the coordinate plane.	3.3 Worksheet 3.1-3.3 Review & Quiz 3.1-3.6 Review & Test				
9. I can use trig. ratios to find an angle or a leg of a triangle. 9. I can evaluate exact values of the trig. functions by using a reference triangle (unit circle). Ex. $\tan(\pi/4)$	3.4 Worksheet 3.1-3.4 Review & Quiz 3.1-3.7 Review & Test				
10. I can graph the six trig. functions and find the transformations (amplitude, frequency, period, phase shifts, stretches & shrinks).	3.5 - 3.7 Worksheets 3.1-3.7 Review & Test				

Mastery Level 4 = I've got this - I can teach this to others. **Mastery Level 3** = I understand - I can do this by myself.

Mastery Level 2 = I mostly get it - I can do this with help. **Mastery Level 1** = I don't understand - I cannot do this yet.



Right Triangle Trigonometry



$$h = \sqrt{x^2 + y^2}$$

$$\sin \theta = \frac{\text{opposite}}{\text{hypotenuse}} = \frac{y}{h}$$

$$\tan \theta = \frac{\text{opposite}}{\text{adjacent}} = \frac{y}{x}$$

$$\sec \theta = \frac{\text{hypotenuse}}{\text{adjacent}} = \frac{h}{x}$$

$$\cos \theta = \frac{\text{adjacent}}{\text{hypotenuse}} = \frac{x}{h}$$

$$\cot \theta = \frac{\text{adjacent}}{\text{opposite}} = \frac{x}{y}$$

$$\csc \theta = \frac{\text{hypotenuse}}{\text{opposite}} = \frac{h}{y}$$